REMARKS

This is a preliminary amendment, in response to the Advisory Action dated January 17, 2006. The Examiner has maintained the rejections from the Final Office Action of October 3, 2005. In that Office Action, the Examiner had rejected claims 1-5, 8-18 and 21-26 under 35 U.S.C. § 102(e) as being anticipated by U.S. Pat. Pub. 2004/0138835 ("Ransom"). Applicants appreciate that Examiner's acknowledged claims 6, 7, 19 and 20 would be allowable if re-written in independent form.

The rejections from the Advisory Action of January 17, 2006 and the Final Office Action of October 3, 2005 are discussed below. The Applicant's have amended independent claims 1, 11, 24, 25 and 26 for reasons related to clarity. No new matter has been added. Applicants believe the application is now in condition for allowance considering the amendments and the following remarks. Reconsideration of the application is respectfully requested.

I. § 102(e) Rejections over Ransom from the Advisory Action of January 17, 2006

The Examiner rejected claims 1-5, 8-18 and 21-26 under 35 U.S.C. § 102(e) as being anticipated by Ransom. Ransom relates to a power management architecture including multiple IED's to manage the flow and consumption of power from the system using real time communications. In particular, in Ransom, "FIG. 2b illustrates an alternate embodiment where an IED 240 is provided which includes power management application components 290." Ransom, ¶77.

Ransom does not disclose a method of identifying an energy driver as claimed in amended claims 1, 11 and 24-26. Ransom fails to disclose the identification of the factors or variables, which influence or affect the energy usage or consumption. Specifically, Ransom fails to disclose the "identifying the at least one energy driver from the quantity metadata contributing to the determined at least one relationship [between the quantity metadata and energy usage data by analyzing the quantity metadata and energy usage data]" as claimed in claim 1; "a processing module ...

operative to determine at least one relationship by analyzing the quantity metadata and energy usage data, the processing module being further operable to assess the quality of the at least one relationship and identify the at least one energy driver from the quantity metadata contributing to the determined at least one relationship" as claimed in claim 11, "means for identifying the at least one energy driver from the quantity metadata contributing to the determined at least one relationship" as claimed in claim 24, "second logic ... operable to determine at least one relationship by analyzing the quantity metadata and energy usage data, the third logic being further operable to assess the quality of the at least one relationship and identify the at least one energy driver from the quantity metadata contributing to the determined at least one relationship" as claimed in claim 25, or "a processing module ... operative to determine at least one relationship by analyzing the quantity metadata and energy usage data, the processing module being further operable to assess the quality of the at least one relationship and identify the at least one energy driver from the quantity metadata contributing to the determined at least one relationship" as claimed in claim 26.

> As defined in the Specification of the present application:
>
> [a]n energy driver is some variable that affects energy usage. Various energy drivers such as occupancy, weather, internal and external environmental conditions and price are known. However, each system that uses energy is unique from the next, and as a result energy drivers are situational dependent. For example, production levels, production schedules, or process variables may be energy drivers for a factory, whereas occupancy may be an energy driver for a commercial building.

See ¶ 37 of the present Application (U.S. Pub. No. 2004/225649). An energy driver is a factor that influences/drives the future usage of energy, i.e. the amount of energy consumed is based, at least in part, on the energy driver. It could be one of the causes for the usage of a certain amount of energy in any given scenario. Therefore, as one example, weather can operate as an energy driver because the colder it is outside in the winter, more energy will be needed to keep warm. Weather is a factor that may cause increased energy

usage. Likewise, price can be an energy driver because people will tend to conserve energy when the price of energy usage is high. There are numerous examples of potential energy drivers that can affect energy usage.

The Examiner cites paragraph 2 of Ransom, which discloses, "[a] typical computer data center may use 100 to 300 watts of energy per square foot compared to an average of 15 watts per square foot for a typical commercial building." However, this is an indication of the amount of energy already used and measured rather than a variable that affects future energy usage. Ransom states that the computer center *uses* "100 to 300 watts of energy per square foot," but does not discuss the *cause* of that energy usage. What is missing from Ransom is the answer to the question: "why does the typical computer data center use 100-300 watts?" The cause of this energy usage or a variable affecting the usage could be an energy driver. For example, Ransom would have to state that the data center used 100 watts when it was not snowing, but used 300 watts during a snowstorm. That would reveal the weather was an energy driver of the computer data center. However, Ransom still fails to disclose the *identification* of an energy driver based on metadata and energy usage data according to claims 1, 11 and 24-26. In the example above, Ransom would have to analyze the energy usage data and quantity metadata to determine that it must have been snowing on a particular day.

Paragraph 2 of Ransom discloses an amount of energy usage as discussed above. Each of claims 1, 11 and 24-26 do disclose "energy usage data." A relationship between the "energy usage data" and quantity metadata is used to identify energy drivers in the claims. The energy usage data in paragraph 2 of Ransom is "[a] typical computer data center [that] may use 100 to 300 watts of energy per square foot compared to an average of 15 watts per square foot for a typical commercial building." There is no disclosure that a relationship is determined between this energy usage data and quantity

metadata. Further, there is no disclosure that the relationship is used to identify energy drivers. Merely disclosing energy usage data as in Ransom is insufficient and is not a disclosure of a "relationship between the quantity metadata and energy usage data by analyzing the quantity metadata and energy usage data [and] identifying the at least one energy driver from the quantity metadata contributing to the determined at least one relationship, wherein energy consumption is at least based on the at least one energy driver" as in the claim 1 and the other independent claims.

Paragraph 2 of Ransom merely states an amount of energy usage rather than identifying an energy driver or the factors causing that energy usage. The energy usage described in paragraph 2 of Ransom is an after-the-fact statement about energy consumption. In other words, after the consumption has taken place, how much energy was used? An energy driver may be the cause or the before-the-fact variables that resulted in the subsequent energy usage. Ransom makes no disclosure of a way of identifying the variables affecting energy usage. A mere statement of an amount of energy usage such as "100 to 300 watts of energy per square foot compared to an average of 15 watts per square foot..." is not a disclosure of an energy driver and more importantly, is not a disclosure of the identification of an energy driver. Claims 1, 11 and 24-26 all disclose identification an energy driver which is a factor influencing the amount of energy used, wherein energy consumption is based at least on the energy driver. In addition, that identification of an energy driver is based on a relationship between quantity metadata and energy usage data, which is also not disclosed in Ransom.

The Examiner argues that the broadest definition of the identification of energy drivers is anticipated by Ransom. The Applicants cannot understand how any definition of energy drivers is disclosed by Ransom, let alone the identification of energy drivers, and let alone the identification of energy drivers based on the relationship between quantity metadata and energy usage

data. The broadest definition of the energy driver could be anything that drives energy. Ransom fails to disclose what is driving energy. Even if Ransom did disclose what is driving energy, amended claims 1, 11 and 24-26 disclose the identification of what is driving energy, wherein the identification is based on quantity metadata and on the relationship between quantity metadata and energy usage data. Applicants maintain that Ransom fails to disclose all the limitations of amended independent claims 1, 11, and 24-26. Dependent claims 2-5, 8-10, 12-18 and 21-23 should be allowed for the reasons set out above for the independent claims.

II. § 102(e) Rejections over Ransom from the Final Office Action of October 3, 2005

The Examiner had stated that Figures 2a and 2b of Ransom disclose the features of the claims. Applicants maintain that Ransom fails to disclose the features of the claims and in particular, Ransom does not disclose that the "relationship between the quantity metadata and energy usage data by analyzing the quantity metadata and energy usage data [is used for] identifying the at least one energy driver from the quantity metadata contributing to the determined at least one relationship, wherein energy consumption is at least based on the at least one energy driver" as in the claims. As discussed above, Ransom fails to disclose energy drivers, or the identification of energy drivers, or the identification of energy drivers based on the relationship between quantity metadata and energy usage data.

As shown in FIG. 2b of Ransom, Ransom discloses many different power management application software components of an Intelligent Electronic Device, such as a "data collection component 250, an automated meter reading component 253 and a billing/revenue management component 252, which may be revenue certified, a peer-to-peer power management component 257, a usage and consumption management component 258, a distributed power management component 254, a centralized power management component 255, a load management component 259,

an electrical power generation management component 260, an IED inventory component 261, an IED maintenance component 262, an IED fraud detection component 263, a power quality monitoring component 264, a power outage component 265, a device management component 251, a power reliability component 256, or combinations thereof." Ransom, ¶ 77.

The Examiner cites these components 250-265 from FIG. 2 as disclosing the identification of at least one energy driver. As claimed, an energy driver is identified "from the quantity metadata contributing to the determined at least one relationship...." The components 250-265 disclosed in Ransom are all software components, which operate within an IED 240 and perform different functions based on the load data received by the IED. Ransom does not disclose that any of the disclosed software components identify energy drivers as claimed.

While Ransom suggests that the components 250-265 may collect data or identify a relationship within the collected data, Ransom fails to disclose that any of these components identifies an energy driver "from the quantity metadata contributing to the determined at least one relationship..." as claimed by Applicants. For example, the Data Collection Component 250 "enables an IED to collect and collate data." Ransom, ¶ 79. The electrical power generation management component 260 "analyzes data received from IED's 102-109 to either minimize or maximize measured or computed values such as revenue, cost, consumption or usage by use of handling and manipulating power systems and load routing." *Id.* IED inventory, maintenance and fraud detection components 261, 262, 263 "receive or request communications from the IED's 102-109 allowing the power management application to inventory the installed base of IED's." *Id.* The power quality monitoring component 264 "reports alarms, alerts, warnings and general power quality status, based on the monitored parameters, directly to the appropriate user." *Id.* These are all examples of software components of an IED, disclosed by Ransom, that either receive or process data; however, there is no teaching or suggestion that any of these components use the data to identify energy drivers as claimed. The components all

deal with the "after-the-fact" energy usage data rather than identifying any "before-the-fact" energy drivers.

The Examiner further cites units 511-518 of FIG. 5b as also disclosing the identification of at least one energy driver. As shown, a pulse is sent to an IED which translates the pulse to usage and consumption data that is transported over the network to power management application components which receive the data and track costs and usages. Ransom, FIG. 5b, units 511-518. While the translation of a pulse into usage and consumption data in unit 512 could be considered the identification of the amount of energy used, it is not an identification of an energy driver, i.e. what caused that usage and, thereby, that pulse to be generated in the first place. FIG. 5b, like FIG. 2b, discloses an analysis of data, but fails to disclose using that data to identify energy drivers as claimed.

Specifically, the components disclosed in Ransom do not relate to variables that affect energy usage, but instead relate to the after-the-fact energy usage itself. The components perform a certain function on the energy usage data, whereas an energy driver is an external factor or condition affecting the usage of energy. The energy driver is identified based in part on the relationship between the *energy usage data* and quantity metadata. The functions performed by the components do relate to calculations or analysis of *energy usage data*, but do not identify factors affecting energy usage.

Ransom further discloses a meter which "records and measures power events, power quality, current, voltage waveforms, harmonics, transients and other power disturbances . . . with the ability to detect, monitor, report, quantify and communicate power quality information." Ransom, ¶ 49. The power quality information disclosed in Ransom is distinct from the energy driver identification from the claims. Power quality information is an analysis of the type or the quality of power that is distributed. Power quality information is determined regardless of the external factors or the environment in which the power is distributed. In other words, the external factors influencing energy usage are irrelevant to determining power quality

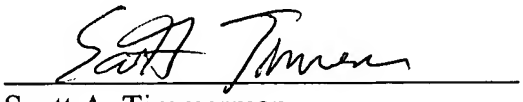
information. As discussed above, energy drivers are external factors influencing energy usage. Regardless of the energy usage, or the factors affecting that usage, the power quality can be determined. The claims identify the external factors, which drive energy usage, whereas, the energy meters disclosed in Ransom measures and analyzes power quality information of the power being delivered. An analysis of power quality information is not an identification of energy drivers.

Accordingly, Ransom does not disclose the identification of at least one energy driver as claimed. While Ransom does disclose the identification of other devices or IED's on the network, Ransom fails to disclose the identification of energy drivers. *See* Ransom, ¶ 131. Because Ransom fails to disclose the identification of an energy driver as claimed in independent claims 1, 11 and 24-26, these claims should be allowed. Dependent claims 2-5, 8-10, 12-18 and 21-23 were also rejected pursuant to 35 U.S.C. § 102(e) as being anticipated by Ransom. Dependent claims 2-5, 8-10, 12-18 and 21-23 should be allowed for the reasons set out above for the independent claims. Applicant therefore requests that the Examiner withdraw this rejection of these claims.

III. Conclusion

The Advisory Action of January 17, 2006 and each of the rejections in the Final Office Action dated October 3, 2005 have been addressed and no new matter has been added. Applicants submit that all of the pending claims are in condition for allowance and notice to this effect is respectfully requested. The Examiner is invited to call the undersigned if it would expedite the prosecution of this application.

Respectfully submitted,



February 3, 2006
Date

Scott A. Timmerman
Registration No. 55,678
Attorney for Applicants

BRINKS HOFER GILSON & LIONE
P.O. BOX 10395
CHICAGO, ILLINOIS 60610
(312) 321-4200